

Office Action Summary

Application N .

09/443,456

Examiner

William Briggs

Applicant(s)

WEGENER ET AL. *CH*

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 10 April 2002.

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-30 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-30 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____

4) ☐ Interview Summary (PTO-413) Paper No(s). _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other:

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DETAILED ACTION

In view of the newly discovered art applied in the rejections following, the final rejection of paper No 13 is withdrawn and PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 10, 11, 16, 17, 18, and 27 - 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Okamoto.

Note that as broadly claimed the machining laser 18 or the machining head and tool 16, 26 in Okamoto is operable to carry out machining "with a local energy feed" of a workpiece in a forming system having plural stations. Further, Applicants description n

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the specification in support of the terminology "forming" processes includes "cutting" which process the machining head 16 is clearly capable of effecting.

Claims 1-8, 10, 17, 18, 23, 25 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Hashimoto et al, EP 0615799.

Hashimoto et al teaches a "forming system" with at least one "forming tool" comprising dies 5-8 that are operative to form a workpiece 9. At least one machining device, "laser process machine 12," that is "integrated into the forming system" as broadly claimed, that comprises a "local energy feed" as a "small" area is effected by the machining tools. Note that the laser tool comprises at least in part "a machining element" and "electromagnetic energy" is conferred by the laser to machine the workpiece. Note further that the laser process machine is mounted to be movable at least in two transverse directions upon a "manipulation device" as shown in figure 2 which would thus be "movable in multiple planes". Note that Hashimoto et al explicitly sets forth a "control mechanism 18 having a program stored therein..." which anticipates the subject matter of claim 10. Also, the process of claims 27-30 would clearly be achieved in the use of the apparatus of Hashimoto et al.

Claims 1, 5, 6-8, 10, 11, 13-17, 23, 25 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Binder or Prinz et al.

As broadly claimed, Binder or Prinz et al teaches a "forming system," for forming metal which may be in the form of "sheets," with plural stations and at least one "forming tool" and at least one "machining tool" is "small" relative to a "dimension of the workpiece." Thus a "local energy feed" insofar as such limitation is definite, or the "machining range without a relative movement between the workpiece and the

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machining device is small in comparison to the dimension of the workpiece" of the tool shown, for example, in Binder at the machining tool ST2 and in Prinz et al at the figure 2 illustrated laser cutter 46 or the CNC machine at 50.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19- 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Arai et al, JP 5-96329.

See figure 1 wherein a laser head is located within the tool "bottom part" of the forming die system. Note that a "manipulation device" is provided to move at least part of the laser. Use of "a plurality of stations" is considered an obvious duplication of parts or stations in Arai, the provision for duplication of parts being established to be within the level of ordinary skill in the art.

Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto et al.

Note that Hashimoto et al does not teach the use of plural machining tools " parallel to one another," or placement of the machining device "between two forming stations" but such duplication of the machining device and placement of the machining device of Hashimoto et al would be obvious to one possessing ordinary skill in the art as an

obvious design choice as the salient machining would remain unchanged regardless of the chosen placement of the device and would be contingent upon, for example, the desired number of machining operations to be performed upon a particular workpiece.

Claims 9 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto et al as cited above and further in view of Koser, 4,043,167.

Further, the "manipulation device" permutations of claims 9-16, such as "swiveling" means, a "swivel arm" or "parallel-kinematics robot," and a "gantry" constitute well-known support and movement providing means for machining tools as shown by Koser, 4,043,167 wherein, for example, the provision for "swivel arms" supporting a machining device in a "forming system" is explicit. One possessing ordinary skill in the art would be expected to readily incorporate such particular "robot" manipulation devices to support the machining tool of Hashimoto et al. Note that it is established that it is obvious to provide automatic means to replace manual activity, the manual control or device which has accomplished the same result. See *In re Venner et al*, 1959 CD 174,

-120 USPQ 192.

Claim Rejections - 35 USC § 112

Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, no means or structure are set forth in the claims to support the claimed function "movable in a path-controlled manner as the phrase "configured to be" does not bear any structural or other relationship to the function recited. Clearly, the "machining element" per se is not capable of moving itself, by disclosure, no matter how "configured." Similar comments apply to claim 19, lines 4 and 5. Further, the scope of the claimed "local energy feed" in claims 1, 19 27 and is unclear as, for example, no

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delineation of how the "energy feed" may be "local" relative to other recited structure of the system is found in the claims. In claim 27 recitation "in a system cycle" is unclear as no "system" or "system cycle" is related to the "step of machining" in the claim and the scope of such reference is unclear.

Response to Arguments

Applicant's arguments with respect to claims 1-30 have been considered but are moot in part in view of the new ground(s) of rejection. Insofar as Applicant's arguments with respect to claims 1-30 apply to previously stated rejections, the following response is made. Applicants' remarks that in Hahimoto et al or EP '799 "the laser processor moves in multiple directions in one plane" and not in "multiple planes". It is noted that, using Applicants' explanation as a starting point, each stated "direction" may be considered to define a different "plane" as would be consistent with geometrical delineations of "planes" and consistent with the broadly claimed limitation. Applicants further remarks that in EP '799 there is "not the slightest teaching...that machining can take place by way of a separate station in *all directions*" (emphasis added) is not well-taken in view of the claimed limitation, "movable in multiple planes."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communication from the examiner should be directed to William Briggs who may be reached at (703) 308-1739 during his normal duty hours of 7:30 a.m. to 6:00 p.m., Tuesday through Friday.

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Messages may be left with the Technology Center 3720 receptionist who may be reached Monday through Friday between the hours of 8:30 a.m. to 5:00 p.m. at (703) 308-1148. In order to reduce pendency and avoid potential delays, Technology Center 3720 is encouraging FAXing of responses to Office Actions directly into the Technology Center 3720 at (703)305-3579. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Technology Center 3720 will be promptly forwarded to the examiner.



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